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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,699	07/30/2003	Jonathon Fischer	10984-1043	5350

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EXAMINER

HEITBRINK, TIMOTHY W

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,699

Applicant(s)

FISCHER ET AL.

Examiner

Tim Heitbrink

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-19, 21 and 23-29 is/are rejected.
- 7) ☒ Claim(s) 7, 8 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7-8-04 & 12-8-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

The disclosure is objected to because of the following informalities: page 4, line 1, "nozzl" should be changed to --nozzle--; paragraph 47, "sourc" should be changed to --source--; paragraph 48, line 2, "r stricting" should be changed to --restricting--; paragraph 52, line 4, "Figur s" should be changed to --Figures-- while on line 5, "th se" should be changed to --those-- and on line 6, "s cond" should be changed to --second--; paragraph 60, line 5, "structur" should be changed to --structure-- while on line 7, "s parate" should be changed to --separate--, "pi c " changed to --piece-- and "th " changed to --the--; paragraph 61, line 5, after "however" a comma --,-- is needed; paragraph 67, line 8, "mad " should be changed to --made--; paragraph 73, line 2, "Th " had been changed to --The-- while on line 4, "b " should be changed to --be--; paragraph 78, line 4, "b " should be changed to --be--; paragraph 89, line 4, "piec " should be changed to --piece--; paragraph 101, line 3, "how v r" should be changed to --however-- and "th " should be changed to --the--, while on line 5, "pi ce" should be changed to --piece--.

Appropriate correction is required.

Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 42, "is is" should be changed to --is--. On line 43, "and sliding" should be changed to --to slide--. On line 47, "second" should be changed to --first-- while on line 48, "first" should be changed to --second--. Also on line 48, "and positioning" should be changed to --to position--.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4, 11, 12, 14, 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niewels (Pub. No. US 2003/0008034) in view of JP8090598.

Niewels discloses an injection molding apparatus having a nozzle 12, a mold block 34, a valve pin 18 having a first guide surface 54 and a first alignment surface 25 (Fig. 4a), said mold block having a second guide surface and a second alignment surface matching the surface 54 and 25 respectively. The valve pin having a relief channel 56. Providing a relief channel in the mold block would have been obvious in light of *In re Japikse*, 86 USPQ 70 where a shift in location of a device when the operation is not otherwise modified is within the skill of the ordinary artisan.

While Niewels does not disclose a manifold to supply the nozzle with resin material and a valve pin having a third guide surface and a third alignment surface, JP8090598 discloses a manifold M1 used to feed a plurality of nozzles to be conventional. Each nozzle is closed via a valve pin having a first and third guide surface and a first and third alignment surface, the first and third guide surfaces corresponding with second and fourth guide surfaces and the first and third alignment surfaces corresponding with second and fourth alignment surfaces, the surfaces located in the nozzle 9.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a manifold and a valve with third guide and alignment surface in the apparatus of Niewels to supply resin to the nozzle and align the valve pin in the nozzle as suggested by JP8090598.

Claims 5,6,15-19, 23, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niewels (Pub. No. US 2003/0008034) in view of JP8090598 as applied to claims 1-4, 11,12, 14, 24-27 above, and further in view of Kazmer et al. (US Patent 6,309,208)

While the seal piece 14 (having a lower thermal conductivity than the nozzle 12) of Niewels does not retain the tip 16 in the nozzle body, Kazmer et al. discloses a seal 39 retaining a tip 37 in the nozzle body via a threaded connection to be conventional where the tip 37 has a higher thermal conductivity than the nozzle body and the seal piece 39 has a lower thermal conductivity than the nozzle body.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to change the tip 16 of Niewels with the tip 37 of Kazmer et al. to provide more heat to the resin and to retain the tip via the seal 39.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niewels (Pub. No. US 2003/0008034) in view of JP8090598 as applied to claims 1-4, 11,12,14,24-27 above, and further in view of Jameson (US Patent 6,036,467).

While Niewels does not disclose a gate insert 42 removably connected to a mold block, Jameson discloses a gate insert 140 removably connected to a mold block 102 to be conventional. It would have been obvious to one having ordinary skill in the art at the time the invention was made to removably connect the gate insert 42 as suggested by Jameson.

Claims 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niewels (Pub. No. US 2003/0008034) in view of JP8090598 and Kazmer et al. as applied to claims 1-6,11,12,14-19, 23-29 above, and further in view of Seres, Jr. et al. (US Patent 5,895,669).

While Niewels does not disclose the gate insert 42 removably connected to the nozzle, Seres Jr. et al. discloses a gate insert 32 removably connected to a nozzle to be conventional.

Claims 7, 8 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Heitbrink whose telephone number is 571-272-1132. The examiner can normally be reached on Tuesday-Friday 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ben Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim Heitbrink
Primary Examiner
Art Unit 1722

5-4-05

twh